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Agricultural Education

Issue Theme
Part-time Education
in Agriculture



A GROUP OF FARM BOYS ATTRACTED TO THE SUMMER PART-TIME SCHOOL
AT EDISTO ACADEMY, SEIVERN, SOUTH CAROLINA, WITH THEIR TEACHERS
(See story on page 5)

EVENTS OF THE MONTH

National Dairy Show, St. Louis, October 12-14

American Country Life Association Conference,
Iowa State College, October 17-20

EDITORIAL COMMENT

AGRICULTURAL EDUCATION

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WHY DOES PART-TIME EDUCATION LAG?

PART-TIME education was one of the earliest forms of agricultural education. Short courses for farm boys were fairly common before the Smith-Hughes Act was passed. That act gave it a place as one of the three major types of education to be carried out under it. Yet, at the end of 11 years of development under the Smith-Hughes Act, we were enrolling but 6,259 students in part-time classes in agriculture, while we enrolled 97,392 in day classes and 36,292 in evening classes.

In contrast, part-time work has held the lead from the beginning in trade and industrial education. In 1927-28, there was an enrollment in such classes of 397,771, in comparison with 62,754 in day and 159,023 in evening industrial classes.

The arguments for the part-time education of farm boys are just as strong as for part-time classes for city boys.

Survey after survey in typical rural regions has revealed the existence of groups of adequate size to whom part-time instruction might be given.

Our obligation to spend \$25 a year for an appropriate type of education for boys out of school is as clear as our obligation to spend \$100 a year for the education of those who have elected to remain in high school.

No group in the country is perhaps in greater need of additional training for health, for social-civic participation, for rewarding use of leisure, as well as for their chosen vocations.

These boys are actually in farming. They are likely to continue in it. In-

struction well given them carries over into practice with facility.

We have reason to doubt that this group is very inferior mentally. These boys are more likely the victims of poor environment, when their present accomplishments are unsatisfactory, than of hereditary characteristics which condemn them without hope. Almost all of them are capable of becoming good and useful citizens.

Once a part-time program is in successful operation, it is probably more appreciated than any other. The teacher of agriculture who can "get hold of" farm boys who are now out of school some of whom are regarded by their communities as potential criminals or ne'er-do-wells, achieves what is regarded as almost the impossible.

There are difficulties in carrying on part-time programs which are not to be found in the other fields. But these do not offset the arguments for the work. We need a little added impetus all along the line to get it established more generally.

We need, in particular, to make it administratively easier for this work to be established. Typically at present it is an added burden on top of a full program for the teachers who attempt it. A special budget, time specially allotted the teacher of agriculture for his part-time classes, and additional special teachers of the subjects other than agriculture employed for the duration of the course are crucial needs if we are to do better with this program in the future than we have done thus far.

ENDOWMENTS FOR AGRICULTURAL DEPARTMENTS

ASIGNIFICANT suggestion is submerged in the article by Mr. A. T. Anderson of Pontiac, Illinois, which is printed in this issue.

Mr. Anderson tells how his department was endowed a number of years ago by the bequest of a local farmer and landowner. Undoubtedly the additional funds thus furnished have had much to do with the strength of the Pontiac program and with the retention, for nine years, of a man of Mr. Anderson's ability.

It appears to us that this situation is more unusual than should be the case. There are persons in every community who have no outlets for their estates which appeal to them. Many of them are intensely interested in perpetuating the good things which they have helped to develop in the community to which they have given their lives. If the public school program in agriculture is sound, it should not be hard for them to see that it is a major factor in the continued well-being of local people and institutions.

No agricultural department in the country has the funds it needs for an adequate program. Commonly they cannot be secured from public sources without robbing other departments of the school or other public institutions. If funds from private sources can be had, without undesirable restrictions upon them, they should certainly be secured.

An added advantage of an endowment is the permanence it gives to the agricultural program. During the time that agriculture is establishing itself as a part of the public school program it would be particularly advantageous to have the assurance that funds will be forthcoming over a long period.

LEST WE FORGET

THE other day the editor picked up the edition for March, 1912 of "Vocational Education," a publication long since abandoned. In it he found a glowing description of the agricultural program of the high school he was then attending. Similar reports of it were published by other responsible agencies, including the United States Bureau of Education.

The program of the school was a pretentious and promising one. It was well financed. The administration was favorable to it. The community was well suited for such a program.

But for many years now this school has had no agricultural program at all. It probably will be a generation before the community will be willing even to consider re-introducing vocational work of this type.

The article referred to resembles strikingly many that are being written nowadays for *Agricultural Education*. We are optimistic about our programs. We have confidence in them. We are sure we can see a tremendous future for them in our states and communities. But often we are quite as uncritical of them, quite as careless as to their soundness, as those persons who managed the work in the community described, or those who, viewing it as "experts," paid it full homage. How sure are we that 17 years from now there will be more than relics of a discredited idea left?

The facts are that the problem of agricultural education is an extremely complicated one and that any one of a variety of causes may lead to failure in our field. We have as yet no science of agricultural education to tell us infallibly what we must do to be saved. There are plenty of weak spots in our current practices. There is no basis for complacency at this stage. We must be searching diligently for our problems and using every possible means of solving them, if agricultural education is to survive as a part of the public school program.

The Mystery in Vocational Agriculture

R. W. CLINE, West Virginia University

SOMEONE has called part-time instruction the mystery in the program for vocational agriculture. The general success of part-time instruction in vocational agriculture has been most varied. While the work has enjoyed splendid progress in some sections, in others where the possibilities were apparently as good, efforts have resulted in almost complete failure.

The state surveys and school census figures have indicated that from 40 to 50 percent of rural boys between the ages of 14 and 21 are out of school. Thus the part-time instruction movement was launched upon two propositions: first, that approximately half of the farm boys of high school age were out of school and, second, that it was the responsibility of the public school to reach these boys with appropriate civic and vocational training despite the fact that they had chosen to go to work rather than remain in school. The promotion of this work largely took the form of a campaign in which the foregoing propositions were stressed before school officials and the public. Earnest pleas on every hand were made for "the boy that our school system has forgotten."

The sentiment was fine and the figures encouraging. But what were the actual facts with reference to the agricultural community? Herein are given the results of a study in one county made for the purpose of answering that question. Montgomery County, in Virginia, was selected after it was determined that the county was typical as far as the factors affecting part-time instruction in vocational agriculture were concerned.

The purpose of the county-wide survey was to locate every boy between the ages of 14 and 21, inclusive, who was out of school and working on a farm. Only boys working full time on the farm were considered. Boys living on the farm and working in the mines or industrial plants in towns were not considered prospective farmers and therefore not included in the survey.

The survey was made by working

in co-operation with the rural schools. The purpose and nature of the survey was explained at a county teachers' meeting and their co-operation requested. A simple survey form was sent to all the teachers along with a letter of approval from the county superintendent of schools.

The teachers, with the help of the pupils, located as many of the boys as possible. This work was followed up with a visit to each school (54 in the county) for the purpose of verifying and completing the data. All data were carefully checked with the aid of a county map and the assistance of well-informed individuals. In addition to the teachers and pupils who aided, merchants, rural mail carriers and farmers were of much service in locating these boys.

Along with the survey of the entire county all the prospective part-time students in one high school community were visited and all factors pertaining to part-time instruction were studied and discussed. The plan of making the survey proved to be a very efficient one. The large number of rural schools, and

the fact that many of the teachers lived in the immediate community contributed to the success of the undertaking.

The survey showed a total of 261 farm boys out of school. The total male high school enrollment for the county for the same year was 299, about 40 percent of whom were farm boys. In the same year only 54 boys were receiving training in vocational agriculture in the two agricultural high schools of the county. When we consider the fact that about 50 percent of these will enter the business of farming it would seem that our high schools are reaching a very small number as compared with the 261 who were already engaged in farming without any vocational training.

We do not know how many of the 261 out-of-school boys will abandon farming as a career. In other words only 17 percent of the boys who are entering farming are being vocationally trained. The remainder are dropping out before reaching the high school.

It might be remarked here that the figures in the school census did not in any way agree with the figures in the survey. The figures in the census were much greater. The object of the census is for the purpose of proportioning the distribution of the state educational fund and not primarily for locating those who should be in school.

The variation in age of the group was not wide enough to be a serious problem in group instruction. Eighty-two percent of the group ranged from 15 to 19 years of age. Considering the fact that much of the work would be individual problem solving, the variation in age and experience should not be a barrier to part-time class instruction.

At first observation it would seem that the variation in previous schooling among members of the group would present a most serious handicap in part-time instruction. Variation in ability to do school work is one of the most difficult problems for any teacher, agricultural or otherwise, even when rigid grade standards are ad-



hered to as a basis for grouping pupils. While average schooling of the group was very low for the bulk of the group, 80 percent dropped out of school during four grades—namely, the fourth thru the seventh.

Twenty-five percent dropped out during the seventh grade (the highest work offered in the local rural schools). There were eight individuals out of the 261 who had never been enrolled in school. Only 7 percent of the group had been enrolled in high school. Only one individual had completed high school. With the seven cases of part-time instruction used in trying out methods of instruction in this study, there was no serious difficulty experienced in overcoming the differences in schooling and mental equipment of the class membership.

Space does not permit of describing the methods. The facts are then that there is not much difference in schooling and that the difference that does exist need cause no embarrassment to teacher or pupil.

The opportunity and the need for part-time instruction would appear inviting. There are sufficient numbers available to challenge attention. They are about the same age and have had similar school training. They are in need of further schooling because the average schooling of the group is lower than the seventh grade with no specific training for farming in which they are employed.

To those responsible for promoting part-time instruction it has seemed that these are sufficient reasons for full speed ahead on part-time work. With pressure the program should develop rapidly. But the fact is that part-time enrollment nationally has increased by not over a thousand in any one year.

Even in states where campaigns for the program have been featured, the results have not been satisfactory. Some states by financial inducement and pressure from above have established a fair program and then instead of the program moving along under the momentum gained the growth ceases or the enrollment actually decreases.

What is wrong? What is the mystery aside from certain states not having pushed a program of part-time instruction? A few indications as to the trouble have been suggested by the study of the part-time prospectives in Montgomery County, Virginia.

Geographic Distribution

With the rapid progress in road building, school consolidation and transportation of pupils it was thought that distribution and isolation of pupils would no longer be an important factor. This was not the case in Montgomery County. It will be noted from the map that the prospective pupils are well scattered. While the map does not show mountains and other natural barriers it will be seen from the neighborhood and community lines that the natural social areas are small.

There are 44 neighborhood areas largely grouped into four larger community areas. The people in one community cannot readily mingle with those in an adjoining community. The same is true of many of the neighborhoods or smaller areas. In many cases this is due to poor road conditions.

It will further be noted from the map that there are few part-time prospec-

tives near the four main high schools. In these sections the boys are either in school or working in town. In one large high school district school busses are operated, affording free transportation for 120 students.

The average part-time prospective lived at a distance of 6.5 miles from a high school and most of the roads were impassable during the winter months, except on horseback. For the same reasons they have not gone to work in town. Town visits for the isolated boys were infrequent and therefore fewer contacts could be made with profitable employment. The cost of attending high school at this distance over unimproved roads was too demanding in effort and too much of a strain on the family finances.

Prospects in Isolated Sections

A study of this factor in the same county in 1924 showed the cost for one family to be as high as \$35 a month for transporting children to high school by automobile. The same study showed that no student traveled as far as five miles over unimproved roads while over an "all weather" road students were attending school from a distance of nine miles. We found the largest groups of prospective part-time students farthest from the nearest high school in the isolated sections such as those marked A and B on the map.

The center for this group was a distance of 12 miles from the nearest high school and 30 miles from the nearest agricultural high school. Not a single boy in the history of this particular neighborhood had ever attended high school. The people were of good stock making their livelihood entirely by farming. This condition is believed to be typical of much of the mountainous section at least in the East. It has its counterpart in much of the Atlantic seaboard region where rivers replace the mountains as barriers in causing isolation and in delaying good roads.

In substance, then, the areas offering excellent part-time opportunities are isolated—are "back in the sticks." The reason that the prospects are good is the very reason that an instructor cannot readily reach them. The road development is an all-important factor.

Not over twelve prospectives were found without reasonable reaching distance of the small town and rural high schools. The remainder were too far away or on roads which were almost impassable during the winter season. Investigation was made of these prospectives in high school areas. With the majority, two conditions were found: The boys were lacking in ambition—were the kind who were unable to secure or remain in permanent employment. Also, they were largely located on small farms which even if well managed could not support the family and in addition an ambitious young man anxious to secure more of this world's goods. Each of these groups of ten or twelve prospectives shrank to three or four pupils as part-time realities.

A class of even four part-time students is a worthy investment if there is no more profitable way for an instructor to reach a "maximum of students with efficient instruction in vocational agriculture." Both of the instructors of agriculture in the county had developed good evening school programs reaching

over forty regularly enrolled farmers. These few ambitious farm boys could readily be accepted and were accepted into the evening classes. Which was the most efficient investment of time for the instructors? No one can deny that their choice of evening school work was a matter of wisdom.

Again, the two instructors might have elected to have conducted part-time instruction in neighborhoods A and B located from 30 to 40 miles away by road with several miles almost impassable. It could have been done and good groups of needy responsive farm boys secured. But efficiency demands, "at what cost." For class instruction the requirement would have been every afternoon, the full afternoon, for at least six or eight weeks followed by a year of supervision. The work would have been in a new community demanding new contacts. The splendid evening school program would have been abandoned. Much of the leadership of the communities served by the instructors, would have had to be forsaken. Yes, part-time work could have been conducted but at a tremendous cost. It was not the efficient thing to do.

At Amherst, in central Virginia, an improved road made it possible to reach an isolated area. With the assistance of the writer some twenty-five farm boys were located who were out of school. Ninety percent were interested in a part-time class without difficulty. The average attendance for the class was 95 percent and more than 80 percent conducted supervised farm practice. The opportunity was there and the instructor saw it.

Variations From Year to Year

Since that time the number of prospectives has been decreasing. The improved road is allowing the more ambitious boys and those with more ambitious parents, the opportunity of going to high school. Others have been leaving—the results of boys finding employment in nearby towns more readily than before. Evidences indicate at present, that the possibilities for part-time instruction will not be very encouraging in a few years hence in this community. The Amherst case is typical of several others observed in Virginia and North Carolina.

The part-time possibilities may change rapidly. There may be little opportunity one year in the instructor's patronage area. Then in one year's time there may be a good opportunity. But that opportunity may last only three to five years. When a really good opportunity develops an instructor should do his utmost to meet it. No phase of our vocational program will give more satisfaction to the instructor; more guidance and help to our young citizens nor more service to the community, than part-time instruction—if a good group of young men can be organized.

There is a decided trend toward compulsory school attendance for young people beyond the ages of 12. This movement is not confined to New York and one or two other states which have been most progressive. The movement has come more slowly in agricultural states and the farming areas of those states where such laws have been enacted. Doubtless the tendency will

(Concluded on page 14)

Part-time Summer Schools

South Carolina discovers a place for part-time work in its yearly program

W. H. GARRISON, Assistant State Supervisor

OF THE four types of agricultural classes, part-time work seems to have made the least progress during the past 12 years. A study of part-time work, made by the writer in 1926, revealed the fact that very little was being done along this line. Practically every state supervisor in the United States reported a great need for this work, and little or no progress.

In making the study of part-time work in 1926 every state supervisor in the United States was asked for a list of his teachers conducting part-time classes. Seventeen states reported some work of this kind, 150 teachers being concerned. Eighty of these teachers responded to questionnaires. It was found that a large number of the 150 teachers were not conducting their classes in accordance with Federal Board requirements. Only about 60 percent of the teachers were conducting supervised practice with part-time pupils. There is reason to believe, however, that during the past three years much improvement has been made in the quality and quantity of part-time work in the United States.

At present South Carolina has 30 white and 22 colored agricultural teachers conducting part-time classes with a total enrollment of 474. For the year ending July 1, 1929, approximately 465 part-time boys completed supervised practice work with a labor income of \$45,625.63. The nature of this project work was similar to that of all-day pupils. Practically all of the classes held 15 meetings of 90 minutes each. In addition to agriculture, the following related subjects are taught: English, arithmetic, health, and citizenship. These subjects are so handled as to deal directly with the problems of farm boys and farmers.

Special Summer School

The most outstanding feature of part-time work in South Carolina is the Special Part-Time Summer School. Such schools have been conducted for the past three years, and the fourth, has just been completed. For the first and second years these schools were held in several different sections of the state. The school has been held in only one section of the state during the last two years.

These schools are held for three weeks during the month of August, as the boys can best leave the farm at this time. Each teacher canvasses his community, with the help of his local chapter of Future Palmetto Farmers, and locates the available material. Only boys whose fathers own or control the land on which they live, and boys who are willing to make plans for farming the coming year, are selected.

The teacher makes a careful study of the boy and his surroundings and sees whether or not he is interested in farming and likely to become a farmer. Only

boys who are mentally and physically able to farm are selected.

It is often necessary for the boy to secure financial assistance. The teacher, boy and parent make arrangements with the local banks or business men to get the money. The loan thus secured is to help pay the boy's expenses while at

building; and farm records.

English—Common errors; letter writing; form and style; buying and selling; advertising; reading and writing for newspapers and farm magazines; and making them of practical value; sentence construction; spelling, punctuation, and simple composition (oral and written).

In addition to the above subjects the schedule carries such recreational activities as baseball, horseshoe pitching, checkers, football, music, swimming, etc. Special lessons are given in swimming, diving, and life saving. Proper certificate and insignia are given upon completion of these courses.

The state health department makes a physical examination of each member of the summer school, and gives him a written statement of his condition with recommendations for correction or improvement.

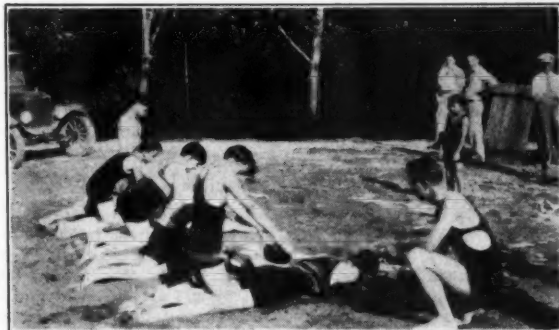
One or two prominent visitors address the boys each day. Some of these speakers are: state warehouse commissioner; director, state board of health; state superintendent of education; state supervisor of agriculture; manager of cotton co-ops; state manager of the Chilean Nitrate of Soda Educational Bureau; legislators and congressmen; secretary, cotton mill; newspaper reporters; county agent, college president; and director, state poultry association.

We feel that the special part-time summer school is a step in the right direction. If the farming class is to be served, these boys who are farming and who do not go to school must be reached. The big problem is getting the boys to attend the school. They are not school-minded, are needed on the farm, dads do not believe the school is of value, carelessness and indifference are some of the obstacles met with by teachers in soliciting boys for the school. This condition is improving from year to year and the writer feels that within a few years the part-time program will at least be at par with all-day and evening work.

Filley, Nebraska, boys are making an annual affair of a banquet served to the entire high school in co-operation with the girls of the home economics department. The affair is held at noon and includes after-dinner talks by members of the agricultural class and other high school students.

The South Dakota conference was held on August 8, 9, and 10, at Madison. W. P. Beard, state supervisor, was in charge. Out-of-state assistance was given by J. A. Linke, regional agent, and H. M. Hamlin of Iowa State College.

Several states and a few local chapters publish special F. F. A. news letters. This is a fine way to let the folks know something about the organization.



Recreational hour at a South Carolina part-time school

school and finance his supervised practice program.

Effort is made to select boys who should farm as farm managers. It is not the purpose of the school to train farm hands. Each boy tentatively selects his supervised practice program before he enters the school.

During the past years schools have been held at denominational academies that are not in session during the summer. The total expense for the three weeks is \$12.50 per boy.

Subjects Taught

Agriculture—This course in agriculture is largely determined by the type of farming and preliminary supervised practice plans of the boys, mainly, poultry, dairying, hogs, cotton, and corn. In so far as possible students are grouped according to their projects. Supervised practice is carried out on the home farm under the direction of the agricultural teacher from whose community the boy comes.

Citizenship—The duties and obligations of citizens; units of government: township, school district, county, state and national; law making bodies; taxation; courts; types of laws and laws relating to farming; elections; how to vote; importance of voting; banking and thrift; insurance; importance of thrift; government agencies aiding the farmers.

Health—Formation of health habits; care of the skin, hair, nails, and teeth; clothing and its care; foods, why we need them, the kind we need; results of improper eating; how to form good eating habits; table manners; milk, its use and care; water; injuries of tobacco and alcohol; flies and mosquitoes; disease prevention; first aid, and sanitation.

Arithmetic—Figuring interest; number of plants and trees per acre; measuring land; calculating discounts; fertilizer problems; insurance; estimation of yields; capacity of bins, etc.; fencing;

Wisconsin Succeeds With Part-time Work

Our Part-time Program

L. M. SASMAN,
State Supervisor

FUTURE Farmers of America, at least in Wisconsin, are not attending high school and consequently are not eligible for higher education in nearly the same proportion that are the sons and daughters of the laboring men, business men, or professional men of the cities. Surveys which have been taken by the department of agricultural education at the College of Agriculture in Wisconsin show that fewer country boys and girls than city boys and girls are going on to school.

Part-time schools for farm boys and girls are the means of opening the door of opportunity for thousands of the farm youth of America who cannot attend the full-time schools but are anxious to learn more about the business in which they expect to engage. From about 1880, when the first short courses were developed at the college of agriculture, thru the early years of the twentieth century when state and county schools of agriculture were established, up to the present time when there is a continual development of part-time schools in vocational agriculture, the leaders in agricultural education have realized the need for part-time schools in agriculture and have attempted the organization of schools which would meet the need.

Surface Barely Scratched

Over five thousand farm boys were enrolled in part-time schools in vocational agriculture in the United States in 1927-28, but when we realize that there are over 3,000,000 farm boys out of school we must also realize that we have but begun to scratch the surface so far as part-time schools in agriculture are concerned. Of course, there are those who say that the farm boy who cannot go to high school will only be a farm hand anyhow and is incapable of learning anything. But it is generally recognized that, in a republic we cannot neglect the education of any group of people. Certainly upon the farms of the nation we need men trained to use their brains as well as their backs.

Thirty-three communities in Wisconsin conducted 37 part-time schools in agriculture this past year, with an enrollment of 583 farm boys. There are three types of schools common in this state, the short unit part-time school held for from 10 to 20 lessons, commonly in the evening; the so-called Wisconsin folk school; and the short courses of the county schools of agriculture.

The short unit school held in the evening is the most common type of part-time school in Wisconsin. Twenty-nine of the 37 schools were of this type. The agricultural teacher discovers thru the pupils in his high school department, and from a personal survey, what boys there are in the community who would be interested in a part-time school and what subject would be of greatest interest. A time for the first meeting is set, usually in October or November, in this state; the boys come in and decide at that meeting what subject they wish to

study and when and where the meetings shall be held.

Last winter the following subjects were selected for study: Farm Mechanics, 7 schools; Feeding Dairy Cattle, 6; Farm Shop, 5; Soils and Fertilizers, 3; Gas Engines, Farm Crops and Rural Electricity were each in two schools; and Farm Accounts and Herd Records each in one.

All but one of these schools was held at the high school; that one was held in a rural school. The time of meeting is usually from about 7:30 to 9. The class period is very commonly followed by a play period. In many communities part-time groups organize a basketball or handball team to play the team of a nearby part-time group. In some cases, one joint meeting is held with another part-time group.

Folk School Popular

The Wisconsin folk school has proven very popular in several communities of the state. This is a part-time school offered by the agricultural teacher in co-operation with other teachers of the school. Meetings are held in the day time for from 15 to 20 lessons. The schools may meet on Saturdays or during the week with classes specially organized for the part-time group.

A unit course in agriculture is offered, a unit of home economics for the girls, and units in such subjects as English, arithmetic and citizenship for both boys and girls. Seventy-seven boys and 38 girls were enrolled in Wisconsin folk schools this past winter. The advantage of this type of school is that it reaches both farm girls and boys and that it interests the whole school rather than just the agricultural department in part-time work.

Short courses of the county schools of agriculture are the third type of part-time school in Wisconsin. These schools are offered by each of the four county schools of agriculture of the state. They are held five days in the week for from 8 to 10 weeks. The course of study includes short units in animal husbandry, plant husbandry, or farm mechanics or poultry, with English and arithmetic. Forty-four boys enrolled last winter.

Supervised practice work is emphasized in connection with all types of part-time schools in Wisconsin. In fact, the classwork is organized about the farming practices of the boys. The boys bring in machinery from the farm for adjustment and repair; they bring in samples of milk and begin keeping systematic herd records; they build self-feeders and revolutionize their swine feeding practices. They introduce the growing of legumes and become interested in the production of purebred grain and livestock. The agricultural teacher maintains close contact with these boys thruout the year.

Neither part-time nor all-day schools can give a complete education to a boy. We are thoroly convinced, in America, that it pays a child to go to high school. But if for any reason he cannot go to high school, the part-time school may offer an opportunity of contact which will give a new vision and lead to an entire change in the mental development of the pupil.

Part-time Schools at Hayward, Wisconsin

D. A. HENDRICKSON,
Instructor

VOCATIONAL agriculture has now been a part of the Hayward high school curriculum for two years. During these two years three part-time schools have been conducted.

The first part-time work offered was a course in rope work and auto mechanics. About fifteen farm boys attended very regularly. Meetings were held every Tuesday and Thursday in the evening. After each meeting the boys played either basketball, volley ball or indoor baseball. This was quite a novelty, as many of the boys had never seen a basketball game.

The second year two part-time schools were conducted, the first in farm accounts and the second in farm shop work. The farm shop was taught primarily to teach the boys the care, operation and sharpening of some of the simple farm tools. Soldering, raft cutting and such work were included as part of the course.

Since very few farmers are keeping any sort of farm records, it seems that a course in "How to Keep Farm Records" is very practical for a part-time school. We used the Wisconsin Farm Record Book and every boy was interested in the work. After the boys had worked from two to three hours it was hard even then to get them away from their accounts to play basketball. As a result of the course, many of the boys are at present keeping records on the home farm.

The enrollment is always obtained by a personal interview with the boy and his parents.

Legge on Agricultural Co-operation

AGRICULTURE has operated as an individual enterprise, competing with organized effort in other industries—individual action and planning as compared with collective thinking and acting. The marked tendency in other industries is toward larger groups in which many minds collectively determine policies and plans and follow them thru. This distinct difference between agriculture and other industries is the reason agriculture is not keeping pace with the other industries in the general progress of the country.

"Markets, after all, are made to a considerable extent by the process of bargaining. The prestige of any trader in the market depends largely on the value of business which he has to transact whether he be a buyer or a seller. If we carry this a little further, say that 100,000 farmers centralize the marketing of their products in the same way, an agency becomes at once a leading factor, entitled, as it should be, to a voice in establishing the rules, regulations and conditions under which its production is disposed of. It is therefore in far better position to obtain for its product its full market value."—Alexander Legge, Chairman, Federal Farm Board, in address before the American Institute of Co-operation.

A Three-year Part-time Course

Contrary to expectations, Pontiac, Illinois, finds its best field for agricultural teaching among the boys out of school

ALVIN T. ANDERSON, Instructor

IT SHOULD be the endeavor of any high school in a progressive community to shape its educational program according to the needs of that community. At Pontiac we are endeavoring to do this, in so far as compatible with certain established standards which have been set up by the universities, colleges, state departments of education, and other supervising agencies whose favor we wish to continue.

We realize, of course, that the desire to adapt the educational program of the high school to the immediate and practical needs of the community may easily be carried too far. For this reason, it is well to have these positive requirements coming from outside supervisory agencies. They serve to keep the high school educational program well balanced, and ward off the danger of yielding too completely to immediate community needs. The educational program in the high school should give a broad general training, it should prepare for college or university, at the same time it should take into consideration the practical needs of the local community.

In order to appreciate to what degree of success we may have attained in this direction at Pontiac, it is necessary that we have clearly in mind the characteristics of our community. Allow me first to say that our educational program, in every particular, has met the requirements of these outside supervising agencies that I have already mentioned. The question then is, have we adapted our local high school program to best serve the needs of our own community? In answering this question it is necessary that we know our community, understand its problems, and realize just what are its needs.

The Community Setting

Pontiac is a city of 8,000 people, the county seat of Livingston County, in Illinois. It is located in the very heart of the cornbelt, where the soil is rich, and black, and deep; where sunshine and rain do not fail; and where a crop failure is unknown. The citizens of Pontiac are happy, prosperous, and contented, knowing that their own welfare is dependent upon the fertile farms, and the success of the farmers in the community. It is a typical midwestern country town made up largely of retired farmers, with professional men only sufficient to meet the needs of a prosperous farming community.

It is apparent, therefore, that any factor that will tend to increase land values, or will increase the income of the farmers in this community, will at once be welcomed by the citizens in Pontiac. When the teaching of Smith-Hughes agriculture was first introduced into the Pontiac Township High School in 1920, it was seen that such teaching had in it the possibilities of doing just this thing, and, therefore it was at once recognized as an important phase of the high school's educational program, and one which would work to the benefit of the entire community, thru the teaching of

better methods of farming and better farm practices, to the farm boys attending high school, who were to become the farmers of tomorrow.

It is now nine years since I came to Pontiac and introduced the teaching of agriculture into the high school under the Smith-Hughes plan. The popularity of the department in the community has steadily increased until we are now getting the fullest co-operation from both our city and country patrons of the high school.

It was during my second year in Pontiac that the agricultural program received a special impetus in the form of an endowment fund which became available under the terms of the will of Mrs. Humiston, a rich landowner of Livingston County, who died during that year. This fund, known as the "Appopos Camp and Bennet Humiston Endowment Fund" was created for the specific purpose of stimulating the teaching of agriculture thru the Pontiac Township High School. As such, it was a material expression of faith in the ability of a high school to improve the farming conditions in the community, thru its teachings.

Endowment Leads to Part-time Program

Mrs. Humiston's reasons for endowing the agriculture department, in her own words, are as follows, "As I realize that the wealth of Livingston County lies in its rich farm lands, and that the

HOW DO YOU ACCOUNT FOR THIS?

Pontiac, Illinois, is a splendid city of 8,000 in the heart of the longest settled and most prosperous section of the Middle West. It is well known for its excellent school system. Yet the teacher of vocational agriculture found 134 farm boys in its territory who were out of school.

coming generations should be taught to utilize and conserve the fertility of the soil."

It was thus that the agricultural department, about five years ago, found itself in a very significant situation. We had the unanimous support of the members of our local board of education; we had a principal who was in sympathy with vocational agriculture; we had the interest and co-operation of the farmers in the community; and back of all this we had the active support of the trustees of the Humiston estate, and the promise on their part, of financial assistance in putting over an enlarged agricultural program in the high school. It was then our responsibility to develop a fuller, and more extensive program in agriculture, and it was the acceptance of this responsibility that led to the

winter short course, as we now have it in Pontiac.

I am attempting to show that our annual winter short course is but a natural evolution in the development of our agricultural program in the high school.

We first strengthened our regular high school work in agriculture by working out a regular course of study for each of the three courses offered, basing each upon the seasonal job analysis plan, in so far as practicable.

We began the publication of a departmental news letter which has proven a very successful venture as a means of establishing and maintaining a contact between the department and the community. This news letter has also undergone a process of evolution, until now it is almost wholly written and edited by an editorial staff of students, appointed for each issue by the president of our Agricultural Club.

We began to place more emphasis upon boys' club work, carried on in co-operation with the Livingston County Farm Bureau. This club work has proven to be a very effective means for securing members for our regular classes in agriculture in high school, as most of the club boys are of grade school age. If we interest them sufficiently while we have them under our leadership in club work, they will invariably take up the work in agriculture when they come to high school.

The trustees of the Humiston estate have turned over the management of a 160-acre farm to the agriculture department, to be used for demonstrational purposes. On this farm we are demonstrating the comparative values of four different methods of soil fertility management. We are also demonstrating the comparative values of different varieties of corn, small grains, legumes, etc.

Every activity on the farm is carefully analyzed and studied in the classroom, thus forming the basis of much of our classroom instruction. More than any other one thing, the management of this farm is winning for us the general interest and support of the farmer. It is a trite saying that the farmer "believes best only what he sees," and for this reason the demonstration farm has already attracted very favorable comment, even from those farmers who were at first skeptical.

But we were not satisfied. We had a feeling that even with our boys' club work in addition to our regular agriculture classes, we were not reaching as many boys in the community as we should. Because we believed this to be true, and in order to verify it, we made a survey of our community in the fall of 1923. This survey confirmed our suspicions. We were not reaching a large number of farm boys. Because they were not attending high school, nor did not intend to do so, the possibilities were that, with our regular high school program in agriculture, we never would reach them. The winter short course offered itself as a possible solution of

this problem. So we decided to give it a trial.

At this time, I wish to invite your attention to a survey of this same community which was made two years ago last September. The community surveyed consisted of nine townships surrounding Pontiac. In this territory there are parts of six different high school districts. There are 79 grade school districts. The territory surveyed is 18 miles square, containing 324 square miles.

The city of Pontiac is located in the center of this community. The purpose of the survey was to secure information concerning the boys in this territory, living on farms, who were between the ages of 8 and 19, inclusive. The survey was made with the co-operation of the country grade school teachers; the country school district serving as the unit.

The following information was obtained for each boy who lived on a farm within this territory: Name, age, address, name of father, if in grade school, what grade; if not in school, whether he is farming, or working in town; and the directions for reaching his home from the local schoolhouse.

Survey Results

The results of the survey were as follows:

We found that there were 630 boys living on farms in this territory who were classed in the twelve ages, 8 to 19 inclusive. The distribution of these 630 boys according to ages was as follows: 8 years old, 54; 9 years, 57; 10 years, 66; 11 years, 60; 12 years, 64; 13 years, 59; 14 years, 47; 15 years, 50; 16 years, 42; 17 years, 53; 18 years, 40; and 19 years, 38.

Of these 630 boys, 401 were in grade school, 3 in the first grade, 18 in the second, 54 in the third, 52 in the fourth, 73 in the fifth, 80 in the sixth, 57 in the seventh, and 64 in the eighth. Of the 229 who were not attending grade school, 83 were in high school, 3 were in college, 9 were working in town and living at home, and 134 were farming, either on the home farm, or as hired hands, or for themselves.

Of these 134 who were farming, only 33 have ever attended high school. Of these 33, 8 were graduates, 1 had 3 years of high school, 11 had 2 years, and 13, 1 year. Thirteen of the 33 who attended high school took agriculture while in school. The number in college is misleading because there are many farm boys from this territory in college who were not included in this survey for the reason that they were over 19 years of age and this survey included only those boys who were not over 19 years of age.

From these results, it will be noticed that of the 229 boys not attending grade school, 83, or 38 percent were either in high school or college, while only 9, or 4 percent, were working in town, and 134, or 58 percent, were engaged in farming.

It is safe to conclude that the majority of this 58 percent who are now farming will never attend high school, as most of them are getting along past what is considered to be the high school age in our community. It is also safe to conclude that inasmuch as they are now engaged in farming, and, because they are not especially prepared for any other

occupation, they will continue in their present one.

This 58 percent of farm boys living on farms who have presumably completed their education as far as regular high school is concerned, is our argument for a winter short course. It was for these 134 boys, ranging in ages from 14 to 19, and living on farms within a 10-mile radius of Pontiac, that the six weeks' annual winter short course was provided by the agriculture department of the Pontiac Township High School.

Comparison With Dane County, Wis.

While we were somewhat surprised to find that in these nine townships there were only 83 farm boys in high school, as compared with the 134 of high school age who were not in school, we may find comfort in the fact that this proportion is above the average. For instance, in a survey made for the western half of Dane County in Wisconsin, by Prof. J. A. James of the department of agricultural education of the University of Wisconsin, it was disclosed that there were 711 boys in the ages of 13 and 20 who were on the home farm and not in

WHAT SHOULD A PART-TIME COURSE ACCOMPLISH?

Mr. Anderson says, "Our idea was not only to teach better farming but to make better citizens of a farming community and to acquaint these farm boys with the best thought in literature. We felt that they should not only know how to grow more and better corn and hogs but that they should learn to live better and more interesting farm lives."

any school, as compared with 162 who were in high school. This gave a percentage of only 16 for farm boys who were attending high school in this Wisconsin territory, as compared with 38 percent in our own Pontiac community.

It was also pointed out that this percentage of boys in high school in Dane County, was above the average for the state of Wisconsin, because this territory was right in the shadow of the University of Wisconsin. No boy included in the survey lived more than 30 miles from Madison. Professor James' conclusions were that there were perhaps more boys in high school in this community because of the university atmosphere, than there would be in a community more remotely removed. We have more than twice the percentage of our farm boys in the Pontiac community attending high school, than in this "favorable" Wisconsin community—38 percent as compared with 16 percent.

But even with our own figures of 83 in high school, as compared with the 134 who are not in school, we see that our big problem is not that of the boys in high school, but rather that of these 134 farm boys who are not in school at all. The chances are that many of the 83 in high school will never go back to the farm, whereas, without doubt a greater portion of the 134 will remain on the farm because they are getting along past

what is considered as the high school age.

It is this group then, that offers our biggest problem. Our regular high school courses in agriculture were not reaching them. The part-time or evening school seemed to offer the only solution to this problem.

Why were these 134 boys not in school? The general assumption was that they could not be spared away from the farm work for all the school year. Winter time, however, especially in this grain farming community, is a period of leisure time for them, time which could well be spent in self-improvement.

After we had decided upon the short course as our solution of this "at-home-farm-boy" problem, the question arose as to what kind of a course it should be. Should we offer unit courses, or should we offer a general course? Should we give a tractor course, or a course on corn raising? After careful consideration of these various types of courses, it was decided to give a general course covering a period of six weeks during January and February, and devoting only about one-fourth of the time to purely agricultural subjects.

Cultural Aspects Included

We felt that if there was anything of cultural value in a high school course, it ought to be worthwhile to include it in our short course. Our idea was not only to teach better farming, but to make better citizens of a farming community, and to acquaint these farm boys with the best thought in literature. We felt that they should know not only how to grow more, and better, corn and hogs, but that they should also learn how to live better and more interesting farm lives.

With this idea in mind, the short course was organized on a three-year basis, giving four subjects each year. The first year we offered the four subjects: Soils and Crops (as the agricultural subject), Rural Civics, Farm Arithmetic, and English. The second year's work included Animal Husbandry as the agricultural subject, and a continuation of the work in Farm Arithmetic, English and Rural Civics. The third year's work included Farm Organization and Management as the agricultural subject, and a continuation of the first two years' work in arithmetic, English and rural civics.

In the course in Soils and Crops, we made a study of soils; the value of fertilizers (limestone, rock phosphate and legumes). In crops, we studied seed corn selection, germination, and corn diseases. Each boy tested his home seed corn for germination and disease. This gave us a full program of work for the six weeks.

In Animal Husbandry, we made a general study of three common farm animals, the horse, the cow and the hog. Each of these was studied under the four heads: (1) Breeds and Types, (2) Breeding and Pedigrees, (3) Feeding and Management, (4) Marketing. Because of lack of time, major emphasis in the case of each animal was placed upon the study under the third heading, Feeding and Management, because we felt that this study would be of most practical value to the boy when he got back to the farm.

In Farm Organization and Management the high school demonstration farm, as well as the home farms of the students enrolled, was used as a basis of study in the classroom. Crop rotations and soil fertility systems were studied and analyzed, with the object of showing the value of using a well-planned crop rotation in connection with a systematic use of fertilizers. Each boy was taught how to keep a farm account book, and as a "follow-up-work," kept a farm account book for his home farm for the following year.

This short course plan has now been in progress in Pontiac for six years.

Besides the work in agriculture, three other subjects are offered during each year of the short course: Farm Arithmetic, English and Rural Civics. These courses are so planned, that while they run continuously thru the three years of the short course, the work may be taken up during any year by new students who may enter the course from year to year.

Content of Related Courses

Farm Arithmetic is designed to be a study of the fundamentals of arithmetic based upon farm problems correlating with the particular farm course studied during that same year. For instance, during the first year, when Soils and Crops was given as the agriculture subject, the Arithmetic work was based upon soil, fertilizer, and crop problems. In the second year, it was based on problems relating to animal husbandry—balancing and figuring the cost of rations, etc. And in the third year it was based on farm management problems. This work in arithmetic has proved to be very practical, and has been appreciated very much by the short course students.

The English course is designed to give the student an opportunity to study good English. He does this thru both oral and written composition work. His themes are largely selected from topics relating to his work in agriculture, rural civics, or some community activity in which he is interested. Poetry and prose are also studied, not from the technician's viewpoint, but simply for the pleasure that may be gotten from such study. In this way the student comes to appreciate and really enjoy the reading of good literature.

The Rural Civics course is designed to point out those things in social life which every good citizen in any community should know. It is a study of the problems of rural community life, but more especially the relation of the citizen to local, state and national government. A study is made of such farm community organizations as the Grange, Livestock Shipping Associations, the Farm Bureau, the Farmers' Elevator, etc. This course has proved to be one of the most popular with the short course boys, and there is no doubt but that it has been very much worthwhile. Farm arithmetic and English are both taught in the forenoon by regular high school instructors in mathematics and English, respectively. Rural civics and agriculture are both taught in the afternoon. I teach these two courses myself.

The short course student is taken into high school life just as any other regular student. He registers, attends classes, studies in the assembly room, attends

general exercises. In fact he cannot be distinguished from the regular students of the high school by the casual visitor.

The text books used are all furnished by the agriculture department, and about the only expense connected with the course is a registration fee of \$1. This fee is charged merely for its psychological effect in making the boy to feel that because he is paying in part for his opportunity, he must work and get his money's worth out of the course.

By way of recreation, the short course boys organize several basketball teams. They use the noon hour for practice in the gymnasium. Then along toward the end of the course they pick a short course basketball team, elect a captain, and play the boys of the regular classes in agriculture a series of games which are always hotly contested. This opportunity to play basketball appeals very much to these boys who have been used to physical work, and it also helps to develop a feeling of good fellowship among them.

It is the custom of the Agriculture Club to hold a Father-Son banquet annually. Since the inauguration of the winter short course, the dads of these short course boys are invited to attend this affair. The annual banquet in 1929, marking the sixth year's work in the short course, included as a special feature, the graduation of the fourth class to complete the three-year short course. The first short course class to receive short course diplomas consisted of eleven boys.

Our method of securing enrollments for our short course is a combination. In the first place we send out a letter to each boy in the community who is not in school. This letter contains a complete outline of the course and also an enrollment card which if he desires to enroll, he signs and returns. Practically 75 percent of our enrollment is secured in this way. Then we follow this up with personal calls.

Recruiting Students

We do not over-urge students to attend, because we feel that we want only those who sincerely desire to get something out of the course. We have nothing spectacular to offer and it is just a little bit difficult to get farm boys to give up their winter spare time in order to study for six weeks. Because of this, we get those boys who really want to learn, and are willing to work.

In the final analysis, the most important question concerning any enterprise always is, has it proved successful? This question has been answered by the boys themselves. In the final examinations one of the questions included is this, "Tell just what you think of the course, and make suggestions for next year's course." In almost every case the boys said that they had gotten very much good from the work, the work in English and Rural Civics proving to be most popular. In last year's class, over half of the class made the suggestion that the course be increased in length from six, to eight or even ten weeks.

The parents of our short course boys are also very much pleased with the course. Several have expressed appreciation of the fact that the Pontiac Township High School has made it possible for their boys to profitably spend their leisure winter-time in school. They also

appreciate the fact that we not only teach agriculture, but those other things which they feel are of equal importance for their boys to know.

The case for the short course, as a solution of the problem of what to do for the farm boy who is not attending school thruout the school year, has been very aptly stated in an article entitled, "Teaching 'Em How to Farm," which appeared in the September 26, 1926, issue of *The Prairie Farmer*.

In this article, the following statement is made, speaking of the farm boys who were not attending high school:

"The winter short course lasting at least two weeks is bridging this gap. No other one thing is doing more to fortify the permanency, and to justify the extension of Smith-Hughes vocational teaching than this effort to give every boy the rudiments of a high school education.

"The short course under the direction of Alvin T. Anderson at Pontiac not only offers courses in agriculture, but even more necessary, work in writing, rhetoric, English and the more fundamental branches of learning in which every boy on the farm or in the city, should be thoroly schooled.

* * *

"The teacher of vocational agriculture in the high school, who recognizes that his field of work is greater than the handful of boys in his classes; who assumes responsibility for reaching the farm boys not in high school, whether thru short courses, club work, or otherwise, who sells his work to the taxpayers of the community, need never fear any "bent-on-economy" legislature or congress—if there is such an animal—separating him from his job with the appropriation's pruning knife."

In conclusion, I wish to quote an editorial on the Pontiac short course which appeared a year ago last December in the *Chicago Daily Drovers Journal*:

"How many of these farm boys will see the opportunity that lies in this offer? We hope many of them, because we feel sure they will never regret the time spent taking such a short course. It represents another step in extending educational facilities, and we think the time will come when such short courses are general because they can make a useful contribution in the dissemination of farm knowledge."

These two opinions which I have just quoted, it seems to me, are very significant statements of the case for the part-time and evening schools, especially significant because they come from that barometer indicating what the farmer is thinking, namely, the farm press.

It is my firm belief, that if vocational agriculture is to endure, it will largely be due to the fact that its teachings are being carried out beyond the doors of the regular classroom, to that larger field—that group of farm boys who at present are not attending school at all.

The vocational agriculture teachers of Rio Grande County, Colorado, have perfected a long-time agricultural education program for the farm boys of that county. The school boards of the county, the county superintendent, and the county agent assisted the teachers in the project.

Our Leadership In Agricultural Education

DR. A. C. TRUE of the U. S. D. A.

ALFRID CHARLES TRUE who, after more than 40 years of distinguished service in the United States Department of Agriculture, died in Washington, D. C., on April 23. As director of the office of experiment stations in the period 1893-1915, and as director of the states relations service in the period 1915-1923, Dr. True made notable contribution to the development of agricultural education and research in the United States.

The death of Dr. True closed a career which perhaps was as wide in its influence as that of any other man who ever served in the United States Department of Agriculture.

Dr. True began his service in the Department of Agriculture in 1889 as editor in the office of experiment stations. He became assistant director of that office in 1891, and director in 1893.

The first record indicating a belief on the part of the federal government that agricultural instruction should be an integral part of public school education is found in Dr. True's report as director of the office of experiment stations in 1893, where he says, after citing what France, Belgium and other countries were doing:

"What the European governments are doing the people themselves in their local communities might undertake in this country. By providing that the children in the common schools should learn how to see, to use their hands, and to adapt means to useful ends, and that the farm boy or girl in the rural high school should be taught in outline the theory and practice of agriculture, an improvement might be made in our public school system which would soon show substantial results in more contented and prosperous rural communities."

One has only to read Dr. True's article in the Year Book of the United States Department of Agriculture for 1897 to get the first far cry for a program of systematic instruction in agriculture in the local school as we have it today. After calling attention to the secondary schools of agriculture in Minnesota and Alabama and commending the establishment of such schools, he says:

"But it is not believed that these agricultural high schools will fully meet the needs of our farmers for agricultural instruction of this grade. Any school so distant from the farmer's home as to necessitate long journeys and residence at the school for two or more years must necessarily be too expensive for most of the farmers' children, especially after they have reached an age when their services may be more or less utilized on the farm. What is needed is courses in agriculture in numerous schools to which farmers' children resort, near their home, to 'finish' their education after they are thru with the common schools."

Since no other federal agency interested itself in the training of the rural youth for the occupation of farming,



Dr. True's office, in 1897, undertook an active propaganda in different parts of the country for the introduction of agriculture into the secondary schools, thru its publications, addresses at educational and farmers' meetings, correspondence and conferences with educators and others interested in this matter, and by co-operation with the Association of Agricultural Colleges, particularly thru its committee on instruction in agriculture of which Dr. True was chairman. These were the times when nature study and gardening were having their day in arousing leaders in education to a greater need for practical education, especially for rural people. The demand for help from the states to the Department of Agriculture became so insistent that in 1901 D. J. Crosby, a graduate of, and instructor in, the Michigan Agricultural College, was added to the staff of the office of experiment stations as a special assistant to Dr. True in work relating to agricultural education. The spread of the nature study and school garden movements intensified the desire of the farmers and the other friends of rural education to have instruction more definitely related to agriculture in the rural elementary schools. This movement for the teaching of agriculture in the elementary schools attracted the attention of the Association of Agricultural Colleges, and at its meeting at Washington in 1903 it was suggested that its committee on instruction in agriculture, of which Dr. True was then chairman, make a report on this matter. This was done in 1904, when a report was presented on "The teaching of agriculture in the rural common schools." The committee found, among other things, that nature study having an agricultural trend was about all that had been attempted in the way of teaching agriculture in the rural schools until this time. This report of 1904 marks the first systematic set-up in the way of a syllabus for the teaching of agriculture in the rural common schools of the United States.

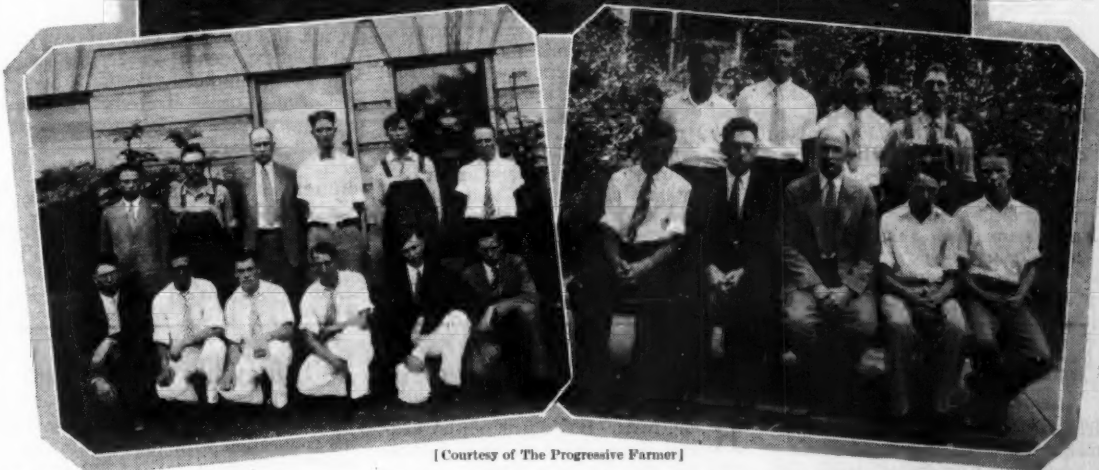
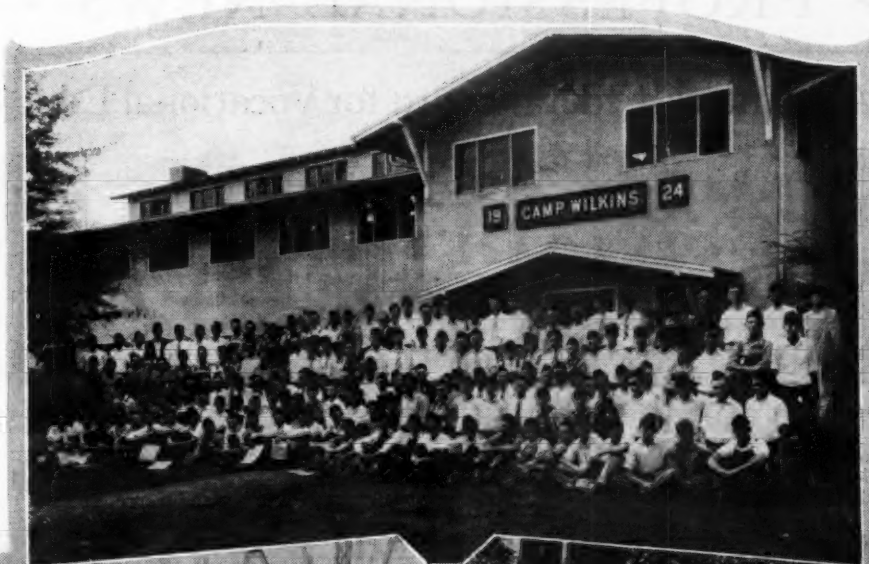
The more favorable economic conditions of agriculture, the rapidly increas-

ing attendance at the agricultural colleges, and other causes helped to promote the movement for secondary education in agriculture, and it made great advances during the first decade of the twentieth century. The office of experiment stations, in 1902, began, under the leadership of Dr. True, to publish a section on the progress of secondary education in agriculture in its annual report. In September, 1905, a department of agricultural education was established in the Experiment Station Record. The appropriation act of the Department of Agriculture, for 1906, included funds for use in promoting the establishment of agricultural schools. The year 1906, therefore, marks the first use of federal funds for the promotion of systematic agricultural instruction in public schools of less than college grade. From this time on for the next ten years the work of the office of experiment stations, as a clearing house of information and advice regarding the courses, personnel, equipment, illustrative material and literature for secondary instruction in agriculture, greatly increased. Representatives of that office were active in meetings of the N. E. A., the American Association for the Advancement of Agricultural Teaching, summer schools for teachers and other educational meetings and in holding personal conferences with school officers and teachers at schools in different states.

For the past six years, Dr. True was engaged in the preparation of a series of publications of much concern to all those who are interested in agricultural education. The first of these publications, "A History of Agricultural Extension Work in the United States" (Misc. Publication 15), was issued by the Department of Agriculture in 1928; the second, "A History of Agricultural Education in the United States" (Misc. Publication 36), is now in press; and the third, "A History of Agricultural Experimentation and Research in the United States," was nearly completed at the time of Dr. True's death and will be printed later.

It was the writer's very great privilege to be a member of Dr. True's official family for nearly seven years. One had only to work with him to realize that his was no common spirit. The substantial qualities of a man were his—sincerity, fidelity, vision, frankness, honesty, and much more. He possessed an instinctive gentility, a true nobility of soul, and a something that eluded analysis but which made itself unceasingly felt. He had in him nothing vulgar or commonplace; his very being repelled familiarity; his fibers were attuned to the sweet and true notes of life, but the coarse and gross affairs of men awoke in him no answering chord. His generosity and self-restraint gave always to others the opportunity, and took to himself the obscure and painstaking task. (Written by Dr. C. H. Lane, Chief in Agricultural Education, Federal Board for Vocational Education.)

Future Farmers of Georgia Conference, July 22-27



[Courtesy of The Progressive Farmer]

These 200 farm boys in the top picture are from 50 communities of Georgia. They attended the state meeting at Athens as delegates, representing the 1,500 members of the Future Farmers of Georgia. While at Athens they discussed activities of Future Farmer chapters, and made plans to be carried out during the coming year.

Grouped at left are the boys who received Georgia Planter degree. Kneeling, left to right: Ralph Pennington, Wrens; Earl Janney, Warwick; Walter Brigham, Girard; Charlie Oglesbee, Girard; Ernest McLocklin, Statham; Billy Bowdoin, Statham. Standing, left to right: H. J. McCurry, Jr., Hollywood; Albert Sosebee, Epworth; Paul W. Chapman, Athens (received the first honorary membership Georgia Planter degree); Olin Shiver, Sale City; Jesse Hatcher, Sale City; James Thornton, Hartwell.

State officers of Future Farmers of Georgia are seen in picture at the right. Seated, left to right: Billy Bowdoin, Statham, president; M. D. Mobley, Athens, advisor; Paul W. Chapman, Athens, advisor; Martin McGregor, Girard, secretary; Lawton Banister, Cumming, vice-president. Standing, left to right: Derrell Alligood, Cadwell, and Cecil Shadburn, Macon, executive committee; Leroy Stalvey, Hahira, reporter; Fred Thomas, Epworth, treasurer.

In the background of the picture at the top is the famous Camp Wilkins, permanent summer home of the Future Farmers of Georgia.

Indiana Organization Complete

INDIANA has received a charter of the Future Farmers of America. It is expected that practically every local organization of students in the state will affiliate with the state-wide group. A state congress will be held soon. The tentative program of work includes the following items:

1. One thousand members of the Future Farmers of Indiana by 1930.
2. A program of work with not less than two comprehensive objectives for each chapter.
3. A thrift club in each local chapter.
4. A candidate for the degree of American Farmer.
5. A public presentation of at least one chapter program by each local chapter during the year.

Lester Burge of Martinsville is president of the temporary organization

which was set up in June by four neighboring schools to get the organization under way. Z. M. Smith, Indiana state director, is executive secretary-treasurer. A. T. Marvel, president of the agricultural teachers association, is a member of the advisory council.

Virginians Convene

NINETY-SEVEN teams representing chapters of the Future Farmers of Virginia competed in the annual judging contest for the state held August 7 and 8 at Blacksburg.

The highest number of points were won by the team from Mica high school. Twenty classes of livestock and crops were judged.

Twenty young men were awarded the State Farmer degree. Minimum qualifications for the degree were completion of at least two years of instruction

in vocational agriculture, an outstanding supervised practice program, a productive investment of at least \$200 which includes a savings account, familiarity with parliamentary procedure by having held office in local organizations, demonstrated ability to lead group discussion for 20 minutes, representation of school on some judging, debating or athletic team, an average of "C" in all high school subjects, and demonstrated qualifications of leadership as shown by activities in the local school and chapter. In addition to meeting these requirements, each candidate successfully passed a subject matter examination held prior to the Rally. Holders of the state degree are known as "Virginia Planters."

Dr. C. H. Lane, chief in agricultural education, Federal Board for Vocational Education and national advisor for the Future Farmers of America, was in attendance at the Rally.

PROFESSIONAL NEWS

New Appointees, Federal Board for Vocational Education



W. A. Ross



H. B. Swanson



J. H. Pearson



F. W. Lathrop

FOUR important positions, created under the provisions of the George-Reed Act, have recently been filled by the Federal Board for Vocational Education. The new specialists began work early in September.

Mr. Ross has been serving as state supervisor in Wyoming. He is Farm Mechanics editor of *Agricultural Education* and co-author, with Schmidt and Sharp, of a standard book on that subject. His new work will be to keep workers in vocational agriculture up-to-date with respect to agricultural subject matter, bringing to them the best that is developed in any quarter.

Mr. Swanson comes to Washington

from Iowa State College, where he has served for the past eight years, teaching special methods courses in agricultural education and other courses and directing the work of a practice school. His earlier experience was in Minnesota, where he began teaching agriculture in 1916. He will serve the Board as specialist in teacher training.

Mr. Pearson has long been well known for the part-time and evening work which has been done under his direction while serving as state supervisor in Nebraska. It will now be his task to encourage and strengthen this program in the nation at large. Mr. Pearson is a member of the editorial

board of *Agricultural Education*.

Dr. Lathrop is to attack the very important problem of developing adequate research in agricultural education. He brings a rich background for this task. His training and early experience were secured in New York. He holds the Ph.D. degree from Cornell University. In recent years he has been connected with the University of Minnesota, serving first in the division of agricultural education and during the past year in the bureau of educational research. Dr. Lathrop is reviewing editor of *Agricultural Education*.

Country Life Association Meets This Month

PRELIMINARY program announcements for the American Country Life Association Conference, which is to be held at the Iowa State College, October 17 to 20, have been printed and may be secured by writing to Benson Y. Landis, executive secretary, American Country Life Association, 105 East 22nd Street, New York City, or Professor W. H. Stacy, field representative, American Country Life Association, Extension Service, Ames, Iowa.

This conference is bringing together leaders in ten types of rural organization programs and provides that these programs shall be considered from four viewpoints, (1) local community problems, (2) county rural programs, (3) state rural programs, (4) national rural programs.

One of these sections considers in a very definite way the program of the rural schools. Leadership for this session includes Miss Agnes Samuelson, state superintendent of public instruction of Iowa; Mr. John Callahan, Wisconsin superintendent of public instruction; Dr. C. A. Fullmer, director of vocational education for Nebraska; Mrs. Katherine Cook of the United States Bureau of Education, and Dr. George Selke, president of the State Teachers College at St. Cloud, Minnesota.

Every Montana teacher is expected to conduct a part-time class as a part of his regular work.

Teachers at Institute of Co-operation

R. D. MALTBY, agent of the Federal Board for Vocational Education for the Southern Region, was in charge of the professional course given for four weeks during July and August in connection with the American Institute of Co-operation, held this year at Baton Rouge, Louisiana. He was assisted for two weeks by W. T. Spanton and J. A. Linke, agents respectively for the Western and North Central Regions. Special attention was given in the course to the conference method of teaching adult groups.

In addition to this course, attending instructors were enrolled in two others dealing with co-operative marketing taught by Dr. Pierce of the University of Kentucky and Dr. Brannan of the University of Arkansas. They also were privileged to attend general sessions for several hours a day which were addressed by leaders in the co-operative movement from all parts of the country. It is expected that next year's meeting will be held at the Ohio State University.

A 38-page guide for measuring the efficiency of an all-day program in vocational agriculture has recently been worked out by Professor G. A. Schmidt of the Colorado Agricultural College, based on his book, "Efficiency in Vocational Education in Agriculture," published last year. The guide is available from its author.

Tiffany Leaves the Field

PROFESSOR E. M. Tiffany of the University of Wisconsin has severed his connection with that institution to enter business in partnership with his wife at Madison.

Mr. Tiffany is nationally known as the author of the "Future Farmer Creed" and the "Song of the Future Farmers." A good deal of the inspiration of the Future Farmer movement traces to these contributions.

Professor F. B. Jenks, teacher-trainer and state supervisor of Vermont, and guiding spirit in the movement for vocational agriculture in that state since its beginning, passed away the last of July. A tribute to his efforts will appear in an early issue of *Agricultural Education*.

Mr. James R. Coxen, director of vocational education for Hawaii and a member of the editorial board of *Agricultural Education*, has resigned his position to become the agent in trade and industrial education for the Federal Board for Vocational Education in the Western Region. Mr. Coxen was formerly agricultural supervisor in Wyoming.

Professor Henry Oberhansley, for many years in charge of agricultural education at the Utah State Agricultural College, has been granted a leave of absence for the coming year to serve as director of the Branch Agricultural College at Cedar City, Utah.

Wyoming Selects the "Master Teacher"

CARL G. HOWARD, teacher of vocational agriculture at Sheridan, Wyoming, was selected August 9 as the Wyoming "Master Teacher" for the 1928-29 school year. His selection marked the closing event of the state conference of teachers of vocational agriculture which was in progress during the week of August 5 to 9.

Mr. Howard hails from Illinois, having been born at Benton, July 11, 1895. He attended the public schools of that state and later entered the University of Illinois, graduating in 1917 with a B. S. degree in agriculture. He has since done graduate work at the University of Wyoming. He is married and has one son.

The experience which Mr. Howard has had gives him a wide knowledge of agricultural conditions. He has farmed in Michigan and Illinois, acted as an agricultural engineer in Eastern Canada, and managed a 640-acre fruit farm. During the World War Mr. Howard was commissioned a second lieutenant of infantry.

The teaching experience of this "Master Teacher" includes the subjects of physics, chemistry, general agriculture and vocational agriculture. His vocational teaching experience is as follows:

Years 1919-20—Kimball, Nebraska.

Years 1920-21—Las Cruces, New Mexico.

Years 1921 to present—Sheridan, Wyoming.

In the 8 years Mr. Howard has been on the job at Sheridan, he has built up a strong department with excellent equipment. The day-school program includes about 60 boys and has been developed from a 2-year course with one year of farm mechanics to a 4-year course with 3 years of farm mechanics. The enrollment has been increased about 400 percent in his 8-year tenure.

His evening class program has included two evening classes in farm mechanics—machinery and tractor repair—which have improved farm practices in the community. A local hardware and implement dealer told Mr. Howard that as a result of the farm machinery evening class instruction carried on by the vocational agricultural department, he could directly trace the sale of \$4,000 of improved farm machinery.

His part-time work started last year and was offered primarily to instruct the out-of-school farm boy in eliminating waste thru keeping a practical system of accurate farm accounts.

Mr. Howard was one of the pioneers in job analysis work and has all his teaching plans set up on this basis. His complete Job Plan Book for Animal Production was mimeographed last year thru the state office and sent out to various teachers over the state and surrounding states. His record and filing system are outstandingly good.

The Sheridan high school department of vocational agriculture, under Mr. Howard's direction, organized the second F. F. A. chapter in Wyoming and held the second F. F. A. banquet. Department activities center around the F. F. A. chapter which is wide awake and active in community and school improvement as well as in individual service to farmers. Two of the vocational agriculture graduates from Mr.



CARL G. HOWARD

Howard's department topped the hog market at Omaha last year.

Next November, the team representing Wyoming, coming from this department and coached by Mr. Howard, will go to Kansas City to compete in the National Vocational Judging Contest there. These boys won the right to go to Kansas City at the state judging contest last January.

Mr. W. T. Spanton, Federal Agent for Agricultural Education, in visiting Mr. Howard last June in company with the state supervisor, remarked that Mr. Howard had built up one of the best organized, equipped and administered departments which he had ever visited.

The points used in the selection of the "Master Teacher" are listed below. The state supervisor, teacher-trainer and a committee of five teachers made the selection.

SCORE CARD	
Wyoming Master Teacher for 1928-1929	
Items	Points
1. Number of people reached in organized instruction	170
2. Types of instruction (all-day, part-time, evening)	60
3. Preparation for and methods of instruction	125
4. Knowledge of his community	60
5. Plan of work based on community needs	75
6. Physical equipment	50
7. Practice program in operation	210
8. Community group leadership activities	100
9. Publicity program	50
10. Participation in the activities of the state program	100
	1000

—W. A. Ross, State Supervisor, Wyoming.

Future Farmers Tour State

THIRTEEN boys from the agricultural department at Wytheville-Max Meadows, Virginia, toured the northern and eastern parts of the state for ten days during the last of June.

The boys lived in tents and did their own cooking. The chief cook and his assistants "rolled out of the hay" around 5 o'clock. Each man had his job. No one had to be on duty more than three or four times unless given work to do as a penalty for a misdemeanor. For the sake of efficiency, however, certain jobs, such as caring for the tent and bedding, were done by the same boys thruout the trip. The party was under way by 8 o'clock. The mid-day lunch was packed in the morning and eaten along the road.

Mr. J. C. Moore was the instructor in charge.

"Is It a Fad to Educate the 92 Percent?" is an answer by Edward T. Franks, vice-chairman of the Federal Board for Vocational Education, to critical articles about vocational education which have appeared during the past year in standard magazines. It is available in pamphlet form from the Federal Board.

Investigate Co-operative Purchase of Fords

INDIANA teachers considered at their state conference the possibility of buying Ford cars on state requisitions with the privilege of turning them in for new cars at the end of the first year. The committee appointed to investigate has received a proposal from one dealer who agrees to furnish teachers authorized by the state and residing in the state the right to purchase thru its agency new Ford cars at the regular state discount of 5 percent from the list price.

This agency agrees to accept model A cars in trade on new cars at \$200 depreciation each 12 months from the purchase price. To secure this arrangement, purchasers would be required to carry full coverage collision insurance, equip seats with covers, and prepay lubrication on the car for 12 months. Under these conditions, used cars would be accepted regardless of mileage. This arrangement would also carry with it the regular discount of 25 percent on all parts and accessories which is customary in the case of state requisitions.

New Jersey Teachers Co-operate in Japanese Beetle Control

THOSE in charge of Smith-Hughes agriculture in New Jersey believe in co-operating with all agricultural agencies in the state. It pays us to do so and at the same time helps the other agencies.

Recently we had a good example of co-operation with the state department of agriculture. On June 23, at the invitation of Secretary of Agriculture W. B. Duryee, the teachers and state supervisors were guests of the Japanese beetle laboratory staff at Moorestown. This laboratory is maintained jointly by the United States Department of Agriculture and the New Jersey State Department of Agriculture.

All of the teachers except one, who was out of the state at the time, were present and the day was spent in learning what measures are practiced in trying to control this pest. These methods of control include sprays, repellants and parasites for growing plants and fumigation and other treatments for nursery stock.

One of the most interesting of the control measures, to the writer at least, is the bringing of parasites to this country to check the spread of the beetle.

One of the unique features of the day was a lunch prepared and served by the members of the laboratory staff. This was followed by short talks by the teachers, who told the department of agriculture men about our work and they in turn showed a moving picture reel that explains the work of their department.

At the close of the meeting it was decided that men from both departments should meet annually to discuss the agricultural work which both are doing, in an endeavor to find ways of making the activities of both more effective.

We feel that this is co-operation and as I said in the first paragraph such co-operation pays everybody concerned.

—H. O. Sampson, State Supervisor.



Reader Reactions

Constructive Comment by Readers is Invited



Agricultural Information Service Needed

I HAVE just read with interest, "Serving the Agricultural Teacher," by Crandall, in the August issue.

You called for comments and here is mine: I think we teachers need such a service very badly, and believe that it would be practicable for the agricultural education departments of the state universities in each state to have a man put in his whole time getting up such a service.

Such a service would consist of a mimeographed news letter sent out each month to all vocational agriculture teachers and county agents and others engaged in similar work. The news letter would contain timely information concerning farm practices most likely to be before us at that time of year. It would contain digests of all new knowledge pertaining to agriculture. The editor of such a news sheet would be the man to write to get special information of any kind.

We teachers could subscribe to such a service by paying something like \$3 per year; there should be 200 or more subscribers in each state, maybe more, which would help cover the cost of such service.

I have been in the work ten years and believe that the hardest job I have is to keep posted on subject matter.

Agricultural Education is a fine magazine and it is keeping us posted on new developments in the science of teaching vocational agriculture. But we need the other service badly.—Donald Pharis, Instructor in Vocational Agriculture, Richmond, Missouri.

Using Contests to Teach Cooperation

In your August edition of *Agricultural Education* you have an editorial on "Contests," which questions the value of judging contests as a means of teaching co-operation and suggests that they are receiving too much emphasis.

It has been my observation that our judging contests, as conducted here in Texas, are a very effective means of teaching co-operation. I have found that such contests will develop group action and group thinking quicker than anything I have ever tried. By means of these contests I have been able to develop a 100 percent vocational agriculture spirit among my students.

I have observed that students work hard to make the teams but that almost without exception they gladly concede the honor to the man who beats them and are willing to co-operate for the good of the group by doing all in their power to help their competitor make the best showing possible, once he has been chosen to represent the group.

Also it was evident to me that the 1,600 vocational agriculture students and teachers in attendance at our state judging contest last April thought of themselves as a distinct group rather

than as individuals or separate school groups. Competition was keen and fair but it was less in evidence than the spirit of co-operation shown by the attitude of, "We are Future Farmers of Texas, sixteen hundred strong."

In our own school at Edinburg, Texas, the boys co-operated perfectly in raising funds for our 1,200-mile trip and in preparing signs for the bus in which we traveled. After we had returned 12 boys asked that they have the privilege of buying registered dairy stock and organizing themselves into a co-operative. This was a direct result of seeing good cattle on the contest trip.

It seems to me that judging contests which bring large groups of boys with a common interest together where they work and play side by side are a very effective means of developing group thinking which is so essential to co-operation. Very truly yours—F. E. Tutt, Teacher of Vocational Agriculture, Abilene, Texas.

The Mystery in Vocational Agriculture

(Concluded from page 4)

continue until the age of 18 will be reached.

The public school system will not expect these young people who make up the "drop-out" army to undergo the



W. N. ELAM

Master Teacher for Texas and Runner-up in the Southern Region in 1928

Mr. Elam is located at Taylor, Texas, a city of 8,000. His contribution has been the encouragement of diversified farming, particularly dairying, in a cotton section. As a result of evening school work, he was able to found a dairy association with two bull blocks, to increase cream shipments from the community, to develop an association for marketing infertile eggs, and to standardize the cotton staple for the community. A community cotton breeding farm is conducted under his supervision.

affliction of the present school routine with its abstract and academic thinking. Instead, even in rural sections, the school program will be revamped to offer them vocational training. The plan will be more of a continuation school type. Then it is that part-time instruction or instruction of this kind will take an important place in our program. What a fine thing it will be when a state says that the farm boys may farm or work but that for four or five months they must be in school for half a day and at the same time the school will be informed that such instruction must be adapted to the needs and capabilities of these young men. This will eventually be done.

"Conclusions"

1. The possibilities for a part-time class in agriculture can be determined only by a local survey.

2. In areas where there are many rural schools, a survey to locate part-time students can best be made thru the rural school teachers. Such a survey can be accomplished during the spare time of the instructor within a week. All-day students, occasional leaders of the out-of-school group and rural mail carriers are helpful in locating part-time material.

3. The variation in age and in previous schooling is not a serious handicap to part-time instruction.

4. The number of the out-of-school group may at first appear large. In most cases not over 50 percent can be gotten into a class. The important observation will be that of determining the geographical distribution of the group. Enough prospectives must be located in some natural sociological area where distances and road conditions will permit of the group congregating readily.

5. Part-time instruction is probably the most worthy and appealing of the four general types recognized (all day, day unit, part-time, and evening school). But this statement is predicated on securing a sufficiently large class of farm boys who will profit by the work and upon whether it is the most efficient investment of the instructor's time.

6. Part-time possibilities change rapidly. An area may offer good possibilities one year and poor possibilities three or four years later.

7. Part-time instruction or instruction of this kind will become important as the movement for compulsory school attendance makes progress. The present rural school programs and methods are not adapted to the out-of-school boy.

In conclusion, nation-wide figures based on the school census, do not show the true facts with reference to part-time possibilities. The part-time situation is a local one and can only be determined by the vocational instructor. He cannot know what the prospects are except by means of a survey. The unreliability of guessing has been pretty well proven. Every instructor who can add to his teaching load should make such a survey.



Farm Mechanics Department



Farm Mechanics Work for Part-Time Students

By W. A. ROSS

PART-TIME schools or classes in vocational agriculture are designed to extend to the out-of-school farm boys a type of instruction which will help them to become better farmers and better citizens and eventually to become established in the farming occupation. What more practical help can we give such boys than by providing instruction in farm mechanics in organized part-time schools and classes?

To secure a farm, make it produce successfully, and carve out a home upon it requires considerable unspecialized mechanical ability. If such a dream is eventually accomplished by the part-time boy, it must usually be done on a small amount of capital and with a minimum expenditure of money. There is no better assurance that this can be done than thru the ability to do efficient farm mechanics work; to make the most out of things at hand; to salvage waste materials; to repair; to construct and to create with his own hands. In addition to the phases just mentioned, such ability means more immediate comforts and conveniences in the newly created farm home.

In planning any part-time course, the instructor must keep in mind the controlling purpose of such training and the characteristics of this group. The instruction given must of necessity be largely individual and of a kind which will lead out and help a boy to become established in the specific farming occupation in which he is most interested. The real part-time class includes instruction in agriculture and related subjects. Farm mechanics should be one of the related subjects.

Generally speaking, instruction in farm mechanics should grow out of the instruction in agriculture. The study of jobs and problems in the phase or phases of agriculture included in the part-time course gives rise to many mechanical repair and construction problems. These, along with other needs and interests of the individual, should become the basis of his farm mechanics program in a part-time school.

In determining the farm mechanics instruction to be included in any part-time course, the teacher must determine the enterprises in which the group enrolled are most interested and in which they need instruction most. The amount of work which can be undertaken is largely determined by the length of the school and its manner of organization. It is usually impossible to attempt instruction in one part-time school in all the enterprises determined as important. It is quite common, however, to find the entire group interested in one farm mechanics enterprise while smaller groups are interested in other enterprises and individuals in still other enterprises. It is a splendid practice for each part-time student to make up his own farm mechanics program and have it checked by the instructor.

Farm mechanics work should never be superimposed upon part-time boys. If a boy needs farm blacksmithing more than any other kind of farm mechanics work, has the desire to learn it, and feels that he can profit most by it, time and trouble should be taken with such a boy to teach him as much as possible about farm blacksmithing in the available time. The same idea holds true in other cases. The part-time boy knows his own needs rather definitely in a majority of instances because of his very real, altho youthful, experience.

Regardless of whether the part-time course is built around dairying, poultry raising, potato growing or other similar enterprises, there is generally an urgent need for some definite instruction in farm mechanics to round out the training experience. When a boy, thru his part-time course, discovers the need for certain labor-saving appliances to carry on his hog production more efficiently, it calls for immediate assistance in planning and making such articles. It may be that improper stock housing conditions existing on the home farm are discovered during the course which call for remodeling plans. In another instance, there may be a definite need for a knowledge of elementary electric wiring in order to equip a poultry house with lights and so on thru innumerable examples.

In every instance the time set aside and the provision made for farm mechanics in any part-time course provides motivation and vitalizes the entire course. Farm mechanics is also important from the economic and practical standpoint as well as from the "human interest" side of the successfully completed part-time course.

Farm Mechanics Short Course Held for the Montana Smith-Hughes Men

By WALDO ZIRNSTEIN,
Instructor, Department of Vocational Agriculture, M. C. H. S., Manhattan, Montana

MONTANA vocational agricultural instructors had the privilege of attending a farm mechanics short course given at the state college last June by S. S. Sutherland, assistant professor of agricultural engineering, in co-operation with M. J. Abbey, state supervisor of Smith-Hughes work in Montana. The course covered a period of nine days, and included a study of the methods of instruction correlated with the actual performance of the type jobs considered. Fourteen vocational agricultural departments were represented.

Possibly the most outstanding accomplishment of the course was the construction of a suggested two-year minimum program of work with required and suggested projects to be studied. This article was based on the opinions of 290 fathers of boys taking vocational agriculture in the state and was presented before the entire group of Smith-Hughes men at the state conference held last August. The program of work follows:

First Year (Required)—

1. Rope work.
2. Tool sharpening (including saw filing).
3. Drawing—working drawings of wood projects.
4. Farm woodwork.
5. Painting and finishing wood projects.
6. Farm building repair.
7. Tool repair and handle fitting.
8. Glazing.
9. Soldering.

First Year (Of lesser importance)—

1. Harness repair.
2. Fence and gate repair.
3. Belt lacing.

Second Year (Required)—

1. Farm machinery repair.
2. Gas engine repair—autos, tractors, or stationary engines.
3. Setting up new farm machinery.
4. Rafter cutting and framing.
5. Farm plumbing.
6. Concrete construction.

Second Year (Of lesser importance)—

1. Forge work.
2. Brazing casting (with forge).
3. Babbitting.
4. Farm building construction.

A recommended list of tools for a class of 20 boys was also decided upon. The outline is rather extensive and will not be given here, but may be secured from the state supervisor by those interested in a more detailed discussion.

It was decided that a good shop teacher would possess the following qualifications:

1. Know his subject matter thoroly.
2. Know how to teach.
3. Know what to teach.
4. Be mechanically inclined.
5. Be on his toes, alert and interested.
6. Have a strong personality.
7. Be a good organizer and a good business man.
8. Have strong physical characteristics and be physically fit.
9. Be a good thinker.

One of the phases of work studied that created a great deal of interest was the establishment and the use of a score card for judging farm shop projects. The score card when completed embodied the following factors:

1. It should be true to life..... 5
2. It should be interesting..... 5
3. It should be clear and definite.... 5
4. It should require thought of good quality 5
5. It should have proper scope and difficulty 5
6. The end should be worthwhile.... 5

A few minutes of almost every day was spent in judging projects that individual instructors wished considered and anyone which did not score 25 was discarded as impractical. It was suggested that each man secure the co-operation of his students in determining the value of any farm mechanics project that they might wish to consider.

This short course was the first of its type to be held at the state college, but every instructor left feeling that it would be difficult to attend any course that would be more inspirational and instructive.

Making the Farm Shop Practical

By F. A. HAGANS,
Augusta, Kansas

THE value of work in any farm shop must be judged primarily by the practicality of the job undertaken in its adaptation to the home farm of the particular boy concerned. The training of a boy to construct or repair in a first class way those jobs related to the farm he is now on will fit him to handle the construction or repair of whatever job he may come up against on any other farm. The pride once instilled into a boy by having things done right and taking a more keen interest in them because he did the work himself is bound to stay with him.

A visit to the H. W. Byers farm will show many improvements brought about by Mr. Byer's son, George, during the two years he was enrolled in vocational agriculture at the Augusta high school. One of the outstanding farm mechanics projects completed by George in the farm shop was the construction of a hay sweep. The sweep they had used before was of the two-wheel type and had become completely worn out. George noticed an old sweep that had been abandoned in his neighbor's field. He went to see this neighbor and bought the irons for \$2.50. A half-day was given him from school to take the old rotten wood from the iron and bring the irons into school. A bill of material was made out and all new lumber purchased, the bill for the lumber amounting to \$18. Approximately 24 hours of time was spent in completing the sweep. Two coats of paint were applied, the paint costing \$1.80. The total cost for material was \$21.30. After adding the labor it would only make the sweep cost about one-half the price of a new one. The work was of the highest quality and was commented on very favorably by several farmers who saw it.

Another project was the construction of a stock trailer which serves many a useful purpose. To replace an old broken down gate that led into the barn lot, George picked up some old gas pipe and woven wire which he found at home, brought it to school and constructed a sturdy gate, using the forge to make eye bolts to hang it by, and swinging it to a 10-inch hedge post. The gate will undoubtedly last for many years. After finishing this job, George started looking for another. There was no definite place to keep the tools so he decided to make a tool cabinet. The tools are now found in their proper place. A garage built at home by George is another project completed during the school year. Aside from the above mentioned jobs and projects, George did many other small jobs related to the farm.

Not only did he do good work in farm shop, but his work in agriculture as a whole stood near the top of the class. The first year he carried a dairy project, in which he kept complete records as to feed and production on one milk cow. His second year's project was with oats. Good seed was purchased and treated for smut before planting, the best of care being taken of the crop. Other activities not required but done simply because the boy had a vision and interest in what he was doing were, treating seed potatoes, remodeling the poultry

house, improved practices in feeding and sanitation of the poultry flock, and in general following better farm practices thruout.

The work of the above mentioned boy is only an example of what is being done by the boys enrolled in vocational agriculture. Other jobs completed in our farm shop the past year included four wagon beds, six stock trailers and one portable hog house, besides many small repair and construction jobs such as repairing gas engines, farm machinery, blacksmithing, and other jobs useful about the home.

While the work in farm shop may not be as noticeable nor show its direct results to the person who is not acquainted with farm conditions, it is nevertheless preparing a generation of Future Farmers who will be able to apply more business and scientific principles to farming than it has in the past, and at the same time develop pride and love in the boy for the farm because it has been made a more comfortable and attractive place on which to live.

Putting the Responsibility on the Boy

By L. E. HALVERSON,
Wakonda, South Dakota

OF ALL the branches of work carried out in the Smith-Hughes agriculture course, the farm mechanics end is probably the most difficult to carry out to complete satisfaction.

The most important reason for this, as we have found, is probably the lack of confidence that the boy has in himself. Of course there are certain boys who dislike this kind of work and it is very seldom that these boys do the best work.

The equipment and method of supplying work will have some influence on the boy. Where the work to be done must depend on what is brought in by the farmers in the community the big problem is to do it as quickly and economically as possible and still have efficient work done.

In our school we have improved this situation very much by placing more responsibility on the boy. For example, in making a wagon box each boy has a piece of the box that he must make. He receives instructions written out in duplicate form. One set is given to the boy and one retained by the instructor. If the boy makes a mistake he is held responsible for the lumber and if the instructor makes the mistake he is held responsible for the lumber. After the pieces are all made the box is put together and if some of the pieces do not fit we check back to see who has made the mistake.

Last year, in our school, we turned out five wagon boxes, three hayracks, two small hog houses, three large feed bunks and two feeding racks as our major projects. We found that the above method worked out even better than we had hoped and with the exception of a few minor mistakes the boys did some very good work.

Every one of the 30 Wyoming teachers is contributing this year to the A. V. A. and subscribing to *Agricultural Education*. The Wyoming state conference was held this year at Laramie, August 5 to 9.

Handy Hints

AS A CLASS project in farm mechanics the boys of the Fairview, Kansas, vocational agriculture department built a 20 by 40 "Kansas type," straw loft poultry house for Otto Duesing, a farmer near Fairview. An old poultry house was torn down and the old lumber worked into the new house. The class built the house in twelve 3-hour class periods including time out for instruction and for transportation to and from the job. This proved a fine project for teaching shop skills, and teaching the principles of poultry housing. It developed in the boys some pride in the group accomplishment. This job had to be done in the fall of the year so there was some difficulty about interesting the boys in smaller projects later on.—R. E. Regnier, Instructor, Vocational Agriculture, Fairview, Kansas.

Last fall a farmer asked me if the boys would make him a self-feeder for feeding laying mash to hens. As we were doing woodwork at the time I told him yes. The boys gained considerable experience: (1) they drew the plans for various self feeders, (2) figured the bill of lumber and cost, (3) and then made it. The farmer was well pleased. He told his neighbors and they came to see our accomplishment. Within two weeks' time six more were made.—E. T. Bateman, Manlius, Illinois. (Fan Mill.)

A tin cigar can may be made into a useful container for nails, screws, rivets, etc. Cut out the one side opposite the seam and slightly turn over the tin edges just out. In place of the regular tin lid to the can fit in a block of wood about an inch thick and nail the tin can proper to the wood with lathing nails. To the wood end of the revamped can fasten to the outside the particular nail, screw, etc., for which the can acts as container. These containers are inserted into the pigeonholes of a section of discarded post office boxes. If the boys do not put the boxes in their correct place it does not make a great deal of difference since there is a sample on the face of the container.—K. E. Wehner, Princeville, Illinois. (Fan Mill.)

Proper cabinets for tools, workbenches both portable and stationary, are aids in doing better work. Tools should be of easy access and so arranged that they are easily checked by the instructor and also in such a way as not to call for a student tool room keeper.

A good motto for any farm shop or the home shop is: "Good tools, in their proper place when not in use, sharp and clean and ready for work."—George B. Jenks, Yuma High School, Yuma, Arizona.

The University of Kentucky held five two-weeks courses for the teachers of the state during the summer. The time was spent in working on the course of study for the coming year for the teacher's home community. Graduate credit for two hours of work was given.

Charles R. Mounce, instructor in vocational agriculture at Kamaknapoko, Maui, Territory of Hawaii, was married on August 14 to Miss Luella Ruth Smeby of Sioux City, Iowa.

